

COMPLETE LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-19 (canceled).

20. (withdrawn): A method of producing an electrical component, comprising the steps of:

inserting a plurality of u-shaped half-turns of electrically conductive material into a plurality of seats defined in a container; and

connecting the plurality of half-turns to the container.

21. (withdrawn): The method of claim 20, further comprising the steps of:

~~producing a plurality of segments of electrically conductive material detachably connected to one another;~~

~~folding the plurality of segments to form the plurality of u-shaped half-turns; and~~

~~separating the plurality of u-shaped half-turns from each other.~~

22. (withdrawn): The method of claim 21, further comprising the steps of:

producing a plurality of panels connected together linearly using a plurality of joining portions; and

folding the plurality of panels and joining portions together to form the container.

23. (withdrawn): The method of claim 22, wherein the plurality of half-turns are connected to the container using a cover, resin bonding, or both.

24. (withdrawn): The method of claim 23, wherein the step of inserting the plurality of half-turns into a plurality of seats comprises the step of:

inserting the half-turns into a plurality of grooves defined in an outer side wall of the container and a plurality of grooves defined in an inner side wall of the container.

25. (withdrawn): The method of claim 23, wherein the step of inserting the plurality of half-turns into a plurality of seats comprises the step of:

inserting the half-turns into a plurality of grooves defined in a plurality of outer side walls of the container and a plurality of grooves extending partially along a plurality of front walls of the container.

26. (withdrawn): The method of claim 25, further comprising the step of inserting a plurality of resilient tabs defined in each half-turn into a plurality of recesses defined in each outer side wall of the container.

27. (withdrawn): The method of claim 26, further comprising the step of inserting a ferro-magnetic core into the container.

28. (withdrawn): The method of claim 27, further comprising the step of wrapping an electrically conductive wire around the ferro-magnetic core.

29. (withdrawn): The method of claim 28, further comprising the step of connecting the combination of the container and the plurality of half-turns to a mounting structure by connecting the plurality of half-turns to a plurality of electrically conductive tracks on the mounting structure, the half-turns and the conductive tracks forming a plurality of electrically conductive turns.

30. (withdrawn): The method of claim 29, further comprising the step of connecting the turns in series, parallel, or a combination of series and parallel.

31. (withdrawn): A method of producing an electrical component, comprising the steps of:

applying a bonding substance to a support structure; and

connecting a plurality of u-shaped half-turns to the support structure using the bonding substance.

32. (withdrawn): The method of claim 31, further comprising the step of connecting a thermal dissipater to the support structure.

33. (withdrawn): The method of claim 32, further comprising the step of removing a detachable plate from the support structure.

34. (withdrawn): The method of claim 33, further comprising the step of applying a metallization layer to one side of the support structure.

35. (withdrawn): The method of claim 34 further comprising the step of inserting a ferro-magnetic core into a u-shaped opening formed by the plurality of u-shaped half-turns.

36. (withdrawn): The method of claim 35, further comprising the step of covering the ferro-magnetic core with an insulating paint.

37. (withdrawn): The method of claim 36, further comprising the step of wrapping an electrically conductive wire around the ferro-magnetic core.

38. (withdrawn): The method of claim 37, further comprising the step of connecting the combination of the support structure and the plurality of half-turns to a mounting structure by connecting the plurality of half-turns to a plurality of electrically conductive tracks on the mounting structure, the half-turns and the conductive tracks forming a plurality of electrically conductive turns.

39. (withdrawn): The method of claim 38, further comprising the step of connected the turns in series, parallel, or a combination of series and parallel.


40. (withdrawn): An electrical component, comprising:

a container; and

a plurality of segments of electrically conductive material connected to the container forming a plurality of u-shaped half-turns, each half-turn including an inner portion extending past an inner lower edge of the container and an outer portion extending past an outer lower edge of the container.

41. (withdrawn): The electrical component of claim 40, wherein the portions extending past the lower edges of the container are folded toward each other or folded away from each other.

42. (withdrawn): The electrical component of claim 41, wherein the plurality of half-turns are separated into two electrically insulated layers of half-turns.

 43. (withdrawn): The electrical component of claim 41, wherein the plurality of half-turns are integrated into the container.

44. (withdrawn): The electrical component of claim 43, further comprising a ferro-magnetic core inserted into the container.

45. (withdrawn): The electrical component of claim 44, further comprising an insulated electrically conductive wire wrapped around the ferro-magnetic core.

46. (withdrawn): The electrical component of claim 45, further comprising;

a mounting structure having a plurality of electrically conductive tracks; and

wherein the combination of the container and the plurality of half-turns is mounted on the mounting structure by connecting the half-turns to the conductive tracks, the half-turns and conductive tracks forming a plurality of turns.

47. (withdrawn): The electrical component of claim 46, wherein the turns are connected in series, parallel, or a combination of series and parallel.

48. (withdrawn): An electrical component, comprising:

a container having a plurality of seats defined therein; and

a plurality of u-shaped half-turns of electrically conductive material connected to the container using the seats.

49. (withdrawn): The electrical component of claim 48, wherein:

each u-shaped half-turn includes a intermediate portion connected to two arms; and

each vertical arm further includes a tab extending outward away from each arm.

50. (withdrawn): The electrical component of claim 49, wherein the u-shaped half-turns are connected to the container using a cover, resin bonding, or both.

51. (withdrawn): The electrical component of claim 50, wherein the plurality of seats comprises a plurality of grooves defined in an outer surface of the container and an inner surface of the container.

B/ 52. (withdrawn): The electrical component of claim 50, wherein the plurality of seats comprise a plurality of grooves defined in a plurality of outer side walls of the container and a plurality of grooves extending partially along a plurality of front walls of the container.

53. (withdrawn): The electrical component of claim 52, further comprising:

a plurality of resilient tabs defined in each half-turn;

a plurality of recesses defined in the container; and

wherein each resilient tab is inserted into one of the recesses.

54. (withdrawn): The electrical component of claim 53, further comprising a ferro-magnetic core inserted into the container.

55. (withdrawn): The electrical component of claim 54, further comprising an electrically conductive wire wrapped around the ferro-magnetic core.

56. (withdrawn): The electrical component of claim 55, further comprising:

a mounting structure having a plurality of electrically conductive tracks; and

wherein the combination of the container and the plurality of half-turns is mounted on the mounting structure by connecting the half-turns to the conductive tracks, the half-turns and conductive tracks forming a plurality of turns.


57. (withdrawn): The electrical component of claim 56, wherein the turns are connected in series, parallel, or a combination of series and parallel.

58. (withdrawn): An electrical component, comprising:

a support structure; and

a plurality of half-turns of electrically conductive material connected to the support structure, each u-shaped half-turn including an intermediate portion connected to two arms, and each vertical arm further including a tab extending outward away from each arm.

59. (withdrawn): The electrical component of claim 58, wherein the support structure includes a detachable plate.



60. (withdrawn): The electrical component of claim 59, wherein the support structure includes electrically conductive material covered with an insulating layer.

61. (withdrawn): The electrical component of claim 60, further comprising a ferro-magnetic core inserted into a u-shaped opening formed by the plurality of half-turns.

62. (withdrawn): The electrical component of claim 61, further comprising an insulated electrically conductive wire wrapped around the ferro-magnetic core.

63. (withdrawn): The electrical component of claim 62, wherein the ferro-magnetic core is covered with insulating paint.

64. (withdrawn): The electrical component of claim 63, further comprising a thermal dissipater connected to the support structure.

65. (withdrawn): The electrical component of claim 64, further comprising:

a mounting structure having a plurality of electrically conductive tracks; and

wherein the combination of the support structure and the plurality of half-turns is mounted on the mounting structure by connecting the half-turns to the conductive tracks, the half-turns and conductive tracks forming a plurality of turns.

66. (withdrawn): The electrical component of claim 65, wherein the turns are connected in series, parallel, or a combination of series and parallel.

Please add the following new claims.

67. (new) A method for producing an electrical component, comprising the steps of:

providing a container including an exterior surface, an inner space, and an open base;

providing a plurality of electrically conductive half-turns; and

connecting the plurality of electrically conductive half-turns to the exterior surface of the container.


68. The method of claim 67, wherein the step of providing the container includes the step of providing a container that includes electrically insulating material.

69. The method of claim 68, wherein the step of providing the container includes the step of providing a container that includes synthetic resin.

70. The method of claim 69, wherein the step of providing the container includes the step of providing a container that includes thermally conductive material.

71. The method of claim 70, wherein the step of providing the plurality of electrically conductive half-turns includes the step of providing a plurality of half-turns including electrically conductive laminar material.

72. The method of claim 67, wherein the step of providing the plurality of electrically conductive half-turns includes the steps of:



providing a sheet of electrically conductive material including a plurality of electrically conductive shaped segments arranged in a predetermined pattern, an inner support structure connected to an inner edge of each shaped segment, and an outer support structure connected to an outer edge of each shaped segment, and

folding the plurality of shaped segments against the exterior surface of the container to form the plurality of half-turns.

73. The method of claim 72, wherein the step of connecting the plurality of half-turns to the exterior surface of the container includes the step of bonding the plurality of shaped segments to the exterior surface of the container prior to folding the plurality of shaped segments against the exterior surface of the container.

74. The method of claim 67, wherein the step of connecting the plurality of half-turns to the exterior surface of the container includes the step of bonding the plurality of half-turns to the exterior surface of the container.

75. The method of claim 74, wherein:

the step of providing the plurality of half-turns includes the step of providing a plurality of half-turns that include a plurality of portions extending past a lower edge of the container; and

the method further includes the steps of

folding the plurality of portions against or away from the lower edge of the container to form a plurality of folded portions;

providing a mounting support including a plurality of welding pads and a plurality of conductive tracks connected to the plurality of welding pads; and

connecting the plurality of folded portions to the plurality of welding pads so that the plurality of half-turns and the plurality of conductive tracks form a plurality of complete turns connected in series, parallel, or a combination of both.

76. The method of claim 75, wherein:

the method further includes the steps of inserting a ferro-magnetic core through the open base into the inner space of the container prior to connecting the plurality of folded portions to the plurality of welding pads and gluing the ferro-magnetic core to an inner surface of the inner space; or

the inner space of the container includes a projection; and

the method further includes the step of embedding a ferro-magnetic core inside the container prior to connecting the plurality of folded portions to the plurality of welding pads by snapping the ferro-magnetic core past the projection into the inner space of the container.

77. The method of claim 76, further comprising the step of wrapping an insulated wire around the ferro-magnetic core prior to inserting or embedding the core inside the container.

78. The method of claim 75, wherein:


the step of providing the plurality of half-turns includes the step of providing a plurality of half-turns that include a plurality of portions extending past a lower edge of the container; and

the method further includes the steps of

providing a mounting support including a plurality of welding pads, a plurality of openings, and a plurality of conductive tracks connected to the plurality of welding pads;

inserting the plurality of portions through the plurality of openings defined in the mounting support; and

connecting the plurality of portions to the plurality of welding pads so that the plurality of half-turns and the plurality of conductive tracks form a plurality of complete turns connected in series, parallel, or a combination of both.



79. The method of claim 78, wherein:

the method further includes the steps of inserting a ferro-magnetic core through the open base into the inner space of the container prior to connecting the plurality of portions to the plurality of welding pads and gluing the ferro-magnetic core to an inner surface of the inner space; or

~~the inner space of the container includes a projection; and~~

the method further includes the step of embedding a ferro-magnetic core inside the container prior to connecting the plurality of portions to the plurality of welding pads by snapping the ferro-magnetic core past the projection into the inner space of the container.

80. The method of claim 79, further comprising the step of wrapping an insulated wire around the ferro-magnetic core prior to inserting or embedding the core inside the container.

81. (new) A method for producing an electrical component, comprising the steps of:

providing a container including an exterior surface, an inner space, and an open base, the exterior surface including a plurality of grooves;

providing a plurality of electrically conductive half-turns; and

connecting the plurality of electrically conductive half-turns to the exterior surface of the container by inserting the half-turns into the grooves.

82. The method of claim 81, wherein the step of connecting the plurality of half-turns to the exterior surface of the container includes the step of bonding the half-turns to the exterior surface of the container.

83. The method of claim 82, wherein:

the method further includes the step of providing a cover; and

the step of connecting the plurality of electrically conductive half-turns to the exterior surface of the container includes the steps of connecting the cover to the half-turns.

84. The method of claim 83, further comprising the steps of:

providing a ferro-magnetic core and a mounting support including a plurality of conductive tracks;

inserting the core into the inner space of the container; and

connecting the plurality of half-turns to the plurality of conductive tracks so that the plurality of half-turns and the plurality of conductive tracks form a plurality of complete turns connected in series, parallel, or a combination of both.


85. (new) A method for producing an electrical component, comprising the steps of:

providing a container including an exterior surface, an inner space, and an open base, the exterior surface including a plurality of retention seats and retention recesses;

providing a plurality of electrically conductive half-turns having a plurality of resilient retention tabs; and

connecting the plurality of electrically conductive half-turns to the exterior surface of the container by inserting the half-turns into the retention seats and inserting the retention tabs into the retention recesses.

86. The method of claim 85, wherein the step of connecting the plurality of half-turns to the exterior surface of the container includes the step of bonding the half-turns to the exterior surface of the container.

 87. The method of claim 86, wherein:

the method further includes the step of providing a cover; and

the step of connecting the plurality of electrically conductive half-turns to the exterior surface of the container includes the steps of connecting the cover to the half-turns.

88. The method of claim 87, further comprising the steps of:

providing a ferro-magnetic core and a mounting support including a plurality of conductive tracks;

inserting the core into the inner space of the container; and

connecting the plurality of half-turns to the plurality of conductive tracks so that the plurality of half-turns and the plurality of conductive tracks form a plurality of complete turns connected in series, parallel, or a combination of both.

89. The method of claim 88, wherein the step of providing the container includes the step of providing a container that includes a plurality of panels connected together using joining portions, a plurality of notches defined between the panels, and a plurality of ribs that form the retention seats.

90. The method of claim 89, wherein the step of providing the plurality of half-turns includes the step of providing a rectangular latten that includes the plurality of half-turns.
